

What is claimed is:

1. A best-cell amendment method comprising the steps of:

at a radio network controller:

determining a hysteresis margin for each cell, this
5 hysteresis margin being a threshold value for determining
whether or not a best cell is to be amended, and notifying
each mobile station of the determined hysteresis margin by
way of a base station;

at said mobile stations:

10 measuring reception quality of a downlink signal of
the best cell and reception quality of a downlink signal
of another cell having the highest reception quality, and
if the reception quality of said other cell having the
highest reception quality is higher than the reception
15 quality of said best cell by a margin that is equal to or
greater than a set hysteresis margin, reporting the
results of measuring reception quality as reception
quality information to said radio network controller;

at said radio network controller:

20 upon receiving reception quality information from a
mobile station, executing control to amend the best cells
of mobile stations that transmitted the reception quality
information; and

at said radio network controller:

25 measuring the degree of congestion of each cell and,

based on the degree of congestion, amending the hysteresis margins of the cells.

2. A best-cell amendment method according to claim 1, wherein said step in which said radio network controller amends the hysteresis margin of each cell based on the degree of congestion is a step of decreasing the
5 hysteresis margin of a cell having a high degree of congestion.

3. A best-cell amendment method according to claim 1, further comprising a step in which said radio network controller effects control to increase the transmission power of a data transmission channel of a
5 cell having a low degree of congestion.

4. A best-cell amendment method according to claim 1, wherein said step in which said radio network controller measures the degree of congestion of each cell is a step of determining the degree of congestion based on
5 the average of the transmission power of data transmission channels of the base station that controls each of said cells.

5. A best-cell amendment method according to claim 1, wherein said step in which said radio network

controller measures the degree of congestion of each cell
is a step of determining the degree of congestion based on
5 the number of mobile stations that set a downlink shared
channel with the base station that controls said cells.

6. A best-cell amendment method according to
claim 1, wherein said step in which said radio network
controller measures the degree of congestion of each cell
is a step of determining the degree of congestion based on
5 the system throughput in said cells.

7. A best-cell amendment method according to
claim 1, wherein said step in which said radio network
controller measures the degree of congestion of each cell
is a step of determining the degree of congestion based on
5 average user throughput in said cells.

8. A mobile communication system, comprising:
a plurality of base stations, each of said base
stations controlling cells;
at least one radio network controller for
5 determining a hysteresis margin for each cell, said
hysteresis margin being a threshold value for determining
whether or not a best cell is to be amended; reporting a
determined hysteresis margin to each mobile station by way
of a base station; upon receiving reception quality

10 information from a mobile station; both amending the best
cell of the mobile station that has sent in the reception
quality information and measuring the degree of congestion
of each cell; and amending the hysteresis margin of each
cell based on the degree of congestion; and

15 a plurality of mobile stations for measuring
reception quality of a downlink signal of a best cell and
reception quality of a downlink signal of another cell
having the highest reception quality; and when the
reception quality of said other cell having the highest
20 reception quality is higher than the reception quality of
said best cell by a margin that is equal to or greater
than a hysteresis margin that has been set, reporting the
measurement results of reception quality as reception
quality information to said radio network controller.

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9. A mobile communication system according to
claim 8, wherein said radio network controller executes
control for reducing the hysteresis margin of a cell
having a high degree of congestion.

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10. A mobile communication system according to
claim 8, wherein said radio network controller executes
control for increasing the transmission power of a data
transmission channel of a cell having a low degree of
5 congestion.

11. A mobile communication system according to claim 8, wherein said radio network controller determines the degree of congestion based on the average transmission power of data transmission channels of a base station that
5 controls each of the cells.

12. A mobile communication system according to claim 8, wherein said radio network controller determines the degree of congestion based on the number of mobile stations that set downlink shared channels with the base
5 stations that controls each cell.

13. A mobile communication system according to claim 8, wherein said radio network controller determines the degree of congestion based on system throughput in each cell.
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14. A mobile communication system according to claim 8, wherein said radio network controller determines the degree of congestion based on average user throughput in each cell.
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15. A radio network controller comprising:
a means for determining a hysteresis margin for each cell that is controlled by a base station, said hysteresis

margin being a threshold value for determining whether or
5 not to amend a best cell;

a means for reporting said determined hysteresis
margin to each mobile station by way of a base station;
and

a means for, upon receiving reception quality
10 information that each mobile station reports after
determining that the reception quality of a cell other
than the best cell is higher than the reception quality of
said best cell by a margin that is equal to or greater
than the set hysteresis margin, amending the best cells of
15 mobile stations that have sent in the reception quality
information and measuring the degree of congestion of each
cell and amending the hysteresis margins of these cells
based on the degree of congestion.

16. A radio network controller according to claim
15, wherein said means for amending the hysteresis margin
executes control to reduce the hysteresis margin of a cell
having a high degree of congestion.

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17. A radio network controller according to claim
15, wherein said means for amending the hysteresis margin
executes control to increase the transmission power of the
data transmission channel of cells having a low degree of
5 congestion.

18. A radio network controller according to claim
15, wherein said measuring the degree of congestion
determines the degree of congestion based on the average
transmission power of data transmission channels of the
5 base stations that control each cell.

19. A radio network controller according to claim
15, wherein said measuring the degree of congestion
determines the degree of congestion based on the number of
mobile stations that set a downlink shared channel with a
5 base station that controls each cell.

20. A radio network controller according to claim
15, wherein said measuring the degree of congestion
determines the degree of congestion based on the system
throughput in each cell.

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21. A radio network controller according to claim
15, wherein said measuring the degree of congestion
determines the degree of congestion based on the average
user throughput in each cell.

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